

State Route 20 Roadway Rehabilitation Project



Draft Environmental Assessment/ Initial Study

State Route 20

Butte Vista Way in Colusa County to Hageman Road in Sutter County

03-COL, SUT-20-KP 52.7/R63.4; R0.0/4.0

(PM 32.7/R39.4; R0.0/2.5)

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General Information About This Document

What's in this document?

This document is an Environmental Assessment/Initial Study, which examines the potential environmental impacts of alternatives for the proposed project located in Colusa and Sutter Counties, California. The document describes why the project is being proposed, alternative methods for constructing the project, the existing environment that could be affected by the project, and potential impacts from each of the alternatives.

What should you do?

- Please read this Environmental Assessment/Initial Study.
- We welcome your comments. If you have any concerns regarding the proposed project, please attend the Public Information Meeting and/or send your written comments to Caltrans by the deadline. Submit comments via regular mail to Caltrans, Attn: Jean L. Baker, Environmental Management, P.O. Box 911, Marysville, CA 95901; submit comments via email to jeannie_baker@dot.ca.gov.
- Submit comments by the deadline: August 15, 2003.

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) undertake additional environmental studies, or (3) abandon the project. If the project were given environmental approval and funding were appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document could be made available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Jean L. Baker, Environmental Management, P.O. Box 911, Marysville, CA 95901; (530) 741-4498 Voice, or use the California Relay Service TDD line at 1-800-735-2929.

Colusa and Sutter Counties
From Butte Vista Way to Hageman Road
KP 52.7/R63.4; R0.0/4.0 (PM 32.7/R39.4; R0.0/2.5)

DRAFT ENVIRONMENTAL ASSESSMENT/ INITIAL STUDY

Submitted Pursuant to: (Federal) 42 USC 4332(2)(C)
(State) Division 13, Public Resources Code

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration, and
THE STATE OF CALIFORNIA
Department of Transportation

Date of Approval

John D. Webb, Chief
North Region Environmental Services
California Department of Transportation

Date of Approval

Gary N. Hamby
District Administrator
Federal Highway Administration



Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate a 14.2 kilometer (8.8 mile) section of State Route 20 from Butte Vista Way in Colusa County to Hageman Road in Sutter County. The proposed rehabilitation includes a pavement overlay, shoulder widening, upgrading various intersections to current standards, raising the profile of the roadway in an area subject to localized flooding, and construction of passing lanes and two-way left-turn lanes.

Determination

Caltrans has prepared an Initial Study, and determines from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The project will have no effect on air quality, land use, mineral resources, noise levels, cultural resources, population and housing, recreation, public services, transportation, traffic patterns, and utilities.
- The proposed project will have no significant effect on floodplains, farmlands, visual resources, water quality, geology, soils, hydrology, and hazardous waste.
- Potential impacts to riparian vegetation will be mitigated.
- Potential impacts to habitat for valley elderberry longhorn beetle, giant garter snake, and Swainson's hawk will be mitigated.
- Potential impacts to migratory birds, vernal pool invertebrates, northwestern pond turtle, and brittlescale will be avoided.
- Wetland impacts will be mitigated to result in a no net loss of wetlands.

John D. Webb, Chief
North Region Environmental Services
California Department of Transportation

Date



Summary

This Draft Environmental Assessment/Initial Study has been prepared to meet requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) for projects that could have adverse impacts on the environment. The following summary identifies major items of importance regarding the proposed project. Detailed project information is presented in the body of the document.

Proposed Action

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) are proposing a highway improvement project on State Route (SR) 20 in Colusa and Sutter Counties. The proposed project would rehabilitate a 14.2 kilometer (km) [8.8 mile (mi)] section of SR 20 from Butte Vista Way in Colusa County to Hageman Road in Sutter County. The project would result in improved traffic safety and operations along this portion of SR 20. The proposed roadway rehabilitation includes a pavement overlay, shoulder widening, upgrading intersections to current standards, raising the profile of the roadway in an area subject to localized flooding, and construction of two-way left-turn lanes and passing lanes.

Project Alternatives

The project range of alternatives was developed in consultation with the U.S. Army Corps of Engineers (ACOE), U.S. Environmental Protection Agency (EPA), and U.S. Fish and Wildlife Service (USFWS) using the National Environmental Policy Act/404 Integration Process (NEPA/404). The following alternatives and design options were considered:

Build Alternative - A “build alternative” was developed as a result of design features that were refined to avoid and minimize impacts to environmentally sensitive areas. The project was designed to avoid a mitigation bank located at Dolan Ranch and owned by Wildlands, Incorporated. The project footprint was also adjusted to minimize wetland impacts and decrease permanent impacts to giant garter snake habitat.

No-Build Alternative - A “no build” alternative proposes to maintain the existing conditions without any improvements.

Alternatives/Design Options - Once environmentally sensitive areas were identified, project elements were modified to reduce impacts to these resources. These elements include the reduction in the length of passing lanes, shifting of the alignment to avoid Dolan Ranch, reduction of the side slope length in environmentally sensitive areas, and minimization of dewatering impacts in wetland areas.

Summary of Impacts and Mitigation

Potential Impact		Build Alternative	No-Build Alternative	Minimization/Mitigation
Land Use – Consistency with General Plans		Yes	No	None required
Farmland Conversion Prime & Unique		2.7 hectares (ha) [6.8 acres (ac)]	0	None required
Williamson Act Land		6 parcels impacted	No impact	None required
Business Displacements		2	No impact	Relocation assistance
Air Quality		Temporary construction impacts	No impact	Construction measures
Noise		Temporary construction impacts	No impact	Construction measures
Water quality		Temporary construction impacts	No impact	Construction measures
Floodplain Encroachment		Transverse at 1 location	No impact	None required
Wetlands	Permanent Impact	3.25 ha (8.03 ac)	0	Purchase mitigation bank credits; construction measures
	Temporary Impact	4.86 ha (12.02 ac)	0	
Waters of the U.S.	Permanent Impact	0.06 ha (0.15 ac)	0	Purchase mitigation bank credits; construction measures
	Temporary Impact	0.34 ha (0.83 ac)	0	
Oak Woodlands		44 oaks to be removed	No impact	Revegetation; avoidance; construction measures
Riparian Habitat		50 willows to be removed	No impact	Revegetation, avoidance, construction measures
California Black Walnut		5 trees to be removed	No impact	Revegetation; avoidance; construction measures
Swainson's Hawk Habitat		14.7 ha (36.4 ac)	0	Purchase mitigation bank credits; construction measures
Valley Elderberry Longhorn Beetle		24 shrubs to be removed	0	Purchase mitigation bank credits; construction measures

Potential Impact		Build Alternative	No-Build Alternative	Minimization/ Mitigation
Giant Garter Snake Habitat	Permanent Impact	5.66 ha (13.98 ac)	0	Purchase mitigation bank credits; construction measures
	Temporary Impact	7.97 ha (19.68 ac)	0	
Hazardous Waste Sites		0	0	None required
Visual Impacts		Highway widening; loss of vegetation	No impact	Revegetation; construction measures
Cultural Resources		No effect	No impact	None required
Cumulative Impacts		No effect; all impacts are mitigated.	No impact	N/A
Growth Inducement		No	No impact	N/A

On July 11, 2002, Caltrans and FHWA entered into the NEPA/404 Integration Process with the ACOE, EPA, and USFWS. As of October 1, 2002, concurrence for the purpose and need and range of alternatives for this project has been received by all resource agencies involved (Appendix A).

Pursuant to Section 7 of the Federal Endangered Species Act, Caltrans, in conjunction with the FHWA, has entered into formal consultation with the USFWS regarding impacts to federally listed species. A Conceptual Mitigation Plan will be prepared for this project, outlining specific mitigation and monitoring requirements for each species. Avoidance and mitigation measures are subject to the review and approval of the USFWS. Caltrans would comply with any new or modified mitigation measures developed during the consultation process.

Issues to be Resolved

Issues to be resolved before implementation of the proposed project are:

- Final project design.
- Right-of-way acquisition and utility relocation.
- NEPA/404 concurrence on Least Environmentally Damaging Practicable Alternative and Conceptual Mitigation Plan.

Permits and Approvals

The impacts identified in this document would require the following permits/approvals:

- Section 404 permit from ACOE for work in jurisdictional waters and wetlands.
- Section 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board (CVRWQCB).
- Section 1601 Streambed Alteration Agreement from California Department of Fish and Game (CDFG).
- A Biological Opinion with a Non-Jeopardy Determination from USFWS under Section 7 of the Federal Endangered Species Act.
- A 2081 permit from the CDFG (if an active Swainson's hawk nest is found within the project limits during pre-construction surveys).

These permits may contain restrictions or additional mitigation measures that would be incorporated into the project.

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List of Technical Studies that are Bound Separately

Air Quality and Noise Analysis

Floodplain Hydraulic Study

Hazardous Waste Evaluation

Historical Property Survey Report

- Historic Resource Evaluation Report
- Negative Archaeological Survey Report

Natural Environment Study

Visual Impact Assessment

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List of Abbreviated Terms

ac	acre
ACOE	United States Army Corps of Engineers
ADA	American Disabilities Act
APE	Area of Potential Effects
BMP	Best Management Practices
Caltrans	California Department of Transportation
CDFA	California Department of Food and Agriculture
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dbh	diameter at breast height
DOT	U.S. Department of Transportation
EPA	United States Environmental Protection Agency
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FPPA	Farmland Protection Policy Act
ft	foot/feet
ha	hectare
in	inch
km	kilometer(s)
KP	kilometer post
m	meter(s)
mi	mile(s)
NEPA	National Environmental Policy Act
NEPA/404	National Environmental Policy Act/404
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
PM	post mile
RWQCB	Regional Water Quality Control Board
SCR	Senate Concurrent Resolution
SHPO	State Historic Preservation Office
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USFWS	United States Fish and Wildlife Service

Chapter 1 Purpose and Need

1.1 Project Purpose and Need

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) are proposing a highway improvement project on State Route (SR) 20 in Colusa and Sutter Counties. The project purpose is to rehabilitate a 14.2 kilometer (km) [8.8 mile (mi)] section of SR 20 on the existing alignment from Butte Vista Way in Colusa County [kilometer post (KP) 52.7/post mile (PM) 32.7] to Hageman Road in Sutter County (KP 4.0/PM 2.5) (Figure 1-1). A field review and deflection study identified visible signs of pavement distress and recommended a dense graded asphalt concrete and an open graded asphalt concrete overlay to rehabilitate the existing pavement. The project would result in improved traffic safety and operations along this portion of SR 20.

1.2 Project Description

The proposed roadway rehabilitation includes a pavement overlay, shoulder widening to 2.4 meters (m) [8.0 feet (ft)], upgrading various intersections to current standards, and raising the profile of the existing roadway in an area subject to localized flooding. It is also proposed to add passing lanes and two-way left turn lanes, which would result in improved traffic safety and operations along this portion of SR 20. Typical sections for the project are contained in Figures 1-2, 1-3, and 1-4.

This section of SR 20 experiences slow-moving traffic from recreational vehicles and agricultural-related activities. Existing SR 20 is a two-lane facility with few passing opportunities, creating traffic queues in both directions, which become lengthy during peak periods. The construction of a 1.6 km (1.0 mi) passing lane in each direction, from KP 59.6 to 60.7 (PM 37.0 to 37.7) in Colusa County would allow traffic to pass slower moving vehicles. For the passing lanes, the existing highway would be widened to provide four 3.6 m (12.0 ft) lanes, a 1.2 m (4.0 ft) median, and 2.4 m (8.0 ft) shoulders (Figure 1-3a).

There are numerous driveways and local roads near the City of Colusa, which access SR 20. A two-way left-turn lane is proposed in Colusa County from Butte Vista Way (KP 52.6/PM 32.6) to Sunrise Boulevard (KP 53.1/PM 33.0) (Figure 1-2b). A two-

way left-turn lane would also be provided from Central Street (KP 1.5/PM 0.9) to Farmlan Road (KP 2.4/PM 1.5) in Sutter County (Figure 1-4). Intersections would be upgraded to current standards throughout the project. Left-turn channelization would also be provided at the entrance to the Colusa County Airport (KP 55.4/PM 34.4).

Steidlmayer Road intersects SR 20 near the SR 45 intersection (KP 59.2/PM 36.8) and at Sycamore Road (KP 61.2/PM 38.0). The project proposes to realign the east end of Steidlmayer Road to provide a perpendicular approach to SR 20. It is also proposed to close the west end of Steidlmayer Road near the SR 45 intersection.

Due to a history of flooding on the roadway from KP 62.0 to 62.3 (PM 38.5 to 38.7) in Colusa County, the project proposes to raise the existing roadway profile above the historic flood elevation and replace existing drainage systems.

The project would also involve extending or replacing various culverts within the project limits. Utility relocation would also be necessary for the project and mapping is currently being prepared.

New right-of-way would be acquired in various locations throughout the project area and extending approximately 12.0 to 50.0 m (39.4-164.0 ft) from the existing centerline.

Approximately 3.3 hectares (ha) [8.0 acres (ac)] of wetlands would be permanently impacted by the project. In addition, approximately 4.9 ha (12.0 ac) of wetlands would be temporarily impacted during construction. Due to the acreage of wetlands impacted, Caltrans and FHWA have entered into the National Environmental Policy Act (NEPA)/404 Integration Process with the Army Corps of Engineers (ACOE), U.S. Environmental Protection Agency (EPA), and U.S. Fish and Wildlife Service (USFWS). On July 11, 2002, Caltrans and FHWA met with representatives from ACOE, USFWS and the EPA and determined this project would enter into the NEPA/404 Integration Process. As of October 1, 2002, concurrence of the purpose and need and range of alternatives for the project has been received by all resource agencies involved.

1.3 Project Background

This project is comprised of four existing projects with similar work, schedules, and locality. These projects were combined to reduce construction costs and allow the contractor to coordinate and schedule construction work to best utilize lane closures

and minimize traffic delays for property owners, the surrounding community, and the traveling public. The projects included two HA-22 Pavement Rehabilitation projects, one HB1 Safety Improvement project, and one State Transportation Improvement Plan passing lane project.

A detention basin or flood easement was proposed to mitigate for additional flooding impacts that may have been caused by raising the profile of the existing roadway between KP 62.0 to KP 62.3 (PM 38.5 to PM 38.7). Hydraulic studies have since determined that sustained flooding in this area is primarily due to groundwater surfacing along both the north and south sides of the highway and is not induced by localized rainfall events. The proposal to provide a detention basin or flood easement was eliminated from the project, since localized flooding would not be impacted by changes to the vertical alignment of the roadway.

A 2.4 km (1.5 mi) passing lane section was originally proposed between KP 58.0 and 61.2 (PM 36.0/38.0). Due to conflicts with the SR 20/SR 45 intersection and impacts to wetlands located in this area, the length of the passing lane section was reduced to approximately 1.6 km (1.0 mi).

The original project scope also proposed cleaning and painting the Meridian Bridge (#18-0008) at the Sacramento River. This work was been removed from the project and will be performed at a later date.

The project will be funded under the HB1 (Safety Improvements), HA22 (Roadway Rehabilitation & Restoration), and the HB4N (Non-Capacity Increasing Operational Improvements) programs at an estimated cost of \$19,848,000.

A Value Analysis study was conducted in January 2003. Specific performance criteria were developed in cooperation with project designers and stakeholders and included safety, pavement serviceability, hydraulics, environmental concerns, congestion relief, and constructability. Using these criteria, alternative concepts were developed to improve performance and reduce costs of the project. Alternative concepts proposed and currently under consideration include stage construction plans, methods to construct shoulders in the wetland area near Steer Ditch, and the closure of the west end of Steidlmayer Road.

Figure 1-1 Project Location Map

Figure 1-2 Typical Section

Figure 1-3 Typical Section

Figure 1-4 Typical Section

Chapter 2 Project Alternatives

2.1 Alternative Development Process

As part of the NEPA/404 Integration Process requiring approval under NEPA and Section 404 of the Clean Water Act, an alternatives analysis was prepared. The following criteria were used for the selection of project alternatives:

- Meet purpose and need of the project;
- Minimize impacts to wetlands and associated species;
- Eliminate impacts to Dolan Ranch, a mitigation bank owned by Wildlands, Inc.;
- Minimize impacts during construction to property owners, the surrounding community, and traveling public by combining elements of four individual projects.

2.2 Project Alternatives

2.2.1 Build Alternative

The “build” alternative has been developed as a result of design features that have been refined to minimize effects to wetlands and avoid Dolan Ranch.

The proposed rehabilitation consists of the following design elements:

- Pavement rehabilitation of existing roadway with an overlay of dense graded asphalt concrete and open graded asphalt concrete;
- Roadway widening to create 2.4 m (8.0 ft) paved shoulders;
- Addition of passing lanes between the SR 20/SR 45 intersection and Sycamore Road in Colusa County;
- Construction of two-way left-turn lanes from Butte Vista Way to Sunrise Boulevard in Colusa County and from Central Street to Farmlan Road in Sutter County;

- Upgrading various intersections to current standards;
- Raising the existing vertical profile of the roadway from approximately KP 62.0 to 62.3 (PM 38.5 to 38.7) in Colusa County.

2.2.2 No Build Alternative

The “no build” alternative proposes to maintain the existing conditions without any improvements. This alternative would produce no environmental impacts and no mitigation would be required. The “no build” alternative would result in further deterioration of the roadway and does not address the existing need for the roadway rehabilitation.

2.2.3 Alternatives/Design Options

Once environmentally sensitive areas were identified, the following project elements were modified to reduce impacts:

- The original 2.4 km (1.5 mi) passing lane section was reduced to approximately 1.6 km (1.0 mi) to avoid wetland impacts;
- The side slope was steepened from 1:6 to 1:4 and the clearance from the toe of the slope to the right-of-way line was reduced from 5.0 m (16.4 ft) to 3.0 m (9.8 ft) in environmentally sensitive areas;
- To eliminate impacts to Dolan Ranch, the alignment was shifted approximately 2.0 m (6.6 ft) to the west;
- The shoulder widening method to be used in the Steer Ditch area would minimize impacts of dewatering on surrounding wetlands and would utilize a 1:1½ catch slope.

Additional proposals considered and eliminated from the project:

- Painting of the Meridian Bridge (#18-0008) at the Sacramento River was removed from the project to simplify construction staging.
- A drainage basin or flood easement was eliminated when studies determined localized flooding was correlated to elevated Sacramento River levels and

changes to the vertical alignment from KP 62.0 to 62.3 (PM 38.5 to 38.7) in Colusa County would not cause additional impacts to drainage.

Chapter 3 Affected Environment, Environmental Consequences, and Mitigation Measures

3.1 Geology and Soils

3.1.1 Affected Environment

The project lies on the northerly portion of the Great Valley Geomorphic Province in Central California, roughly 1.0 km (0.6 mi) southwest of the Sutter Buttes. Geologic mapping of the region revealed the vicinity of the project to be underlain by fine-grained deposits of silt and clay in flood basins between modern watercourses and marsh deposits. The project area is located in an area of relatively low seismic potential. No earthquake faults are known to exist at or near the project.

The predominant soil types identified in the Colusa County portion of the project are Marvin clay loam, Marvin clay, Sycamore loam, Sycamore clay loam, Sycamore fine sand, and Sacramento silty clay loam (Harradine 1948). These soils are found on alluvial fans or floodplains and are described as nearly level, poorly drained, and slightly alkaline. In the Sutter County portion of the project, the predominant soil types are Columbia-Sycamore, Colusa-Sycamore, and Marvin (Gowans and Lindt, Jr. 1965). These soils are described as nearly level to gently sloping with well-drained sandy loam soil.

3.1.2 Impacts

Impacts to soils would occur from construction activities such as grading, excavating, and leveling in the project area. The embankment widening for construction of shoulders between the Steer Ditch Bridge (#15-0018) and the SR20/SR 45 intersection would require placement of fill material in perennial wetland areas located along both sides of the roadway. A detailed geotechnical analysis will be performed to identify geologic conditions that may affect construction methods.

3.1.3 Mitigation Measures

No mitigation is required. Temporary and permanent erosion control measures, as required by Caltrans Best Management Practices (BMPs), would minimize impacts to soils within the project area.

3.2 Water Quality and Stormwater Runoff

The federal Clean Water Act (CWA) of 1972 addresses issues regarding water pollution control and water quality protection. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States for their beneficial uses. Federal environmental regulations based on the CWA have evolved to require the control of pollutants from municipal separate storm systems (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, and storm drains) and construction activities (clearing, grading, and excavation). Discharges from such sources were brought under the National Pollution Discharge Elimination System (NPDES) permit process by amendments to the CWA in 1987 and the subsequent 1990 promulgation of storm water regulations by the EPA. In California, the EPA has delegated administration of the federal NPDES program to the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs). Pursuant to these regulations, a NPDES permit is required for all Caltrans projects where construction activity would disturb more than 0.5 ha (1.0 acre) of total land area.

3.2.1 Affected Environment

The proposed project is located in the Central Valley Region (Region 5) of the RWQCB. The project study area consists of a linear corridor, following SR 20 as it passes over the Sacramento River. The Sacramento Valley was historically a large riparian floodplain, which has been altered to accommodate agriculture. Most of the waterways within the project area have been modified from the meandering streams and sloughs that were scattered throughout the Sacramento Valley. The waterways now follow the straight edges of property lines and flow through culverts under existing roads.

Surface waters within the project area include the Sacramento River, Steer Ditch, Sycamore Slough, Powell Slough, various unnamed drainage canals, freshwater seasonal wetlands, and perennial wetlands.

3.2.2 Impacts

The increase in impermeable surfaces from construction of this project is minimal and the proposed construction would have a negligible effect on drainage. The project would involve the installation, repair, or replacement of culverts along the project limits. These culverts would be placed in-line with existing facilities and would not result in alterations in flow patterns. Culvert work would take place when the irrigation ditches and drainage canals are dry.

The proposed project would require excavation, grading, roadway construction, and loss of vegetation, all of which have the potential result in soil and ground disturbances. These disturbances would create loose and/or unprotected soil that, if not properly managed and contained on the project site, could be carried by surface runoff, or wind, to watercourses. Such increases in sediment and turbidity could adversely affect receiving water quality.

Construction activities may introduce chemicals, oils, and greases that could be carried by surface runoff to surface water, if not properly managed. These impacts have the potential to occur for the duration of construction. Highway runoff and other long-term maintenance activities may also introduce these pollutants to surface water.

It may be necessary to dewater a portion of the perennial wetland in the area adjacent to SR 20 between Steer Ditch and SR 45 to construct roadway shoulders. The dewatering method would reduce the creation of a sediment plume when fill is placed in the wetland, and would help preserve water quality.

3.2.3 Mitigation Measures

The contractor would be required to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to protect receiving waters from pollution. A site-specific SWPPP would be developed and implemented as required by the Caltrans Statewide NPDES permit.

To reduce impacts due to erosion, sedimentation, and introduced pollutants, both temporary and permanent erosion control measures would be implemented. These measures include, but are not limited to, the following:

- All “in-water” work would comply with standards in the Central Valley Basin Plan of the Central Valley Regional Water Quality Control Board (CVRWQCB). The contractor’s work would comply with the water pollution protection provisions of Section 7-1.01G of Caltrans Standard Specifications and SWPPP, as well as with all conditions contained in regulatory permits.
- Prior to excavation, temporary erosion control fencing would be placed down slope of areas where disturbance of native soil is anticipated. The temporary fence would be maintained in a functional condition until soil disturbance activities are complete and permanent erosion control is applied. Loose soil built up behind the fencing would be incorporated into the slope or taken offsite.
- The contract specification for permanent erosion control would require the use of California native forb and grass species, from the same elevation and geographic area as the project site.
- Soils would be amended with compost containing long-term soil nutrients and slow-release organic fertilizers to provide nutrients over the first year. Mulches used on the project would be from source materials that would not introduce exotic species. No wheat or barley straw would be used on the project because of the potential to introduce weeds. Rice straw would be used in non-wetland areas. Native grass straw would be used in wetland areas.
- BMPs as described in the Caltrans Construction Site BMP Manual would be implemented.
- If dewatering of the perennial wetland area between Steer Ditch and SR 45 is required, Caltrans, in coordination with the resource agencies, would develop an appropriate method for isolating and dewatering the work area to minimize the potential impacts to water quality.
- If dewatering is not conducted, then at minimum, a floating “silt curtain” would be installed adjacent to where fill is placed to minimize the occurrence of a sediment plume spreading throughout the wetland.

3.3 Hazardous Waste/Materials

3.3.1 Affected Environment

A hazardous waste evaluation was conducted and limited to a review of a record search, study of aerial photographs, and discussions with the Colusa County Department of Environmental Health. Based on this information, the potential for hazardous waste is not expected to exist within the project study limits with the exception of yellow thermoplastic highway striping located in the existing roadway.

3.3.2 Impacts

Construction of the project would result in the demolition of an office building, mini-storage complex, and several concrete bins used for gravel storage. These structures could contain asbestos and/or lead-based paint.

Yellow thermoplastic highway striping may contain heavy metals such as lead and chromium, which may exceed hazardous waste thresholds and could produce toxic fumes when heated.

3.3.3 Mitigation Measures

Prior to demolition, structures would be inspected to determine the presence or absence of asbestos and lead-based paint. If any structures to be demolished or disturbed during construction contain asbestos, a qualified asbestos abatement contractor would handle debris removal and disposal. If it is determined that lead-based paint is present above the regulatory threshold, it would be disposed of at an appropriate hazardous waste facility.

The contractor will be required to follow the guidelines in the draft Standard Special Provisions for Removal of Traffic Stripe and Pavement Marking. If after subsequent testing, the removed yellow thermoplastic traffic striping material is determined to be hazardous material, it will be properly disposed of at an appropriate waste facility.

3.4 Air Quality

3.4.1 Affected Environment

The proposed project is located in Sacramento Valley Air Basin. The Sacramento Valley Air Basin includes the counties of Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo, Yuba, and portions of Placer and Solano. The Colusa County portion of the project is governed by the Colusa County Air Pollution Control District. The Feather River Air Quality Management District regulates the portion of the project located in Sutter County.

Naturally occurring asbestos, found in ultramafic serpentine rock, is known to exist in portions of western Colusa County. This ultramafic rock is not found in Sutter County. Asbestos is regulated as an airborne toxic material and strict limits are placed on its use and handling in working environments. Naturally occurring asbestos is not expected to be encountered within the project area.

3.4.2 Impacts

The Colusa County portion of the project is located in a federal attainment or unclassified area for all federal ambient air quality standards and therefore, is exempt from a regional conformity analysis. The local effects of this project with respect to carbon monoxide (CO) or particulate matter (PM₁₀) concentrations must be considered. Using the screening process outlined in the “Transportation Project-Level Carbon Monoxide Protocol” (Institute of Transportation, U.C. Davis, 1997), it was determined that the proposed project would not result in adverse impacts to air quality and no further analysis is required.

In Sutter County, the project is listed as non-attainment for ozone and attainment/unclassified for all other federal air quality standards. Since the improvements proposed for this portion of the project (shoulder widening, intersection channelization, and pavement rehabilitation) would not affect the capacity or composition of traffic, a regional conformity analysis is not required. Additionally, a project level analysis of local carbon monoxide impacts, as outlined in the “Transportation Project-Level Carbon Monoxide Protocol”, is not necessary for non-capacity increasing projects built on an existing alignment. The federal and state attainment status for the project area is contained in Table 3.1.

Table 3.1 Attainment Status for Air Quality Standards

Federal Attainment Status			
Pollutant		Colusa County	Sutter County
O₃ (Ozone)	1 Hour Standard	Attainment/Unclassified	Non-Attainment
PM₁₀ (Particulate Matter)		Attainment/Unclassified	Attainment/Unclassified
NO₂ (Nitrogen Dioxide)		Attainment/Unclassified	Attainment/Unclassified
SO₂ (Sulphur Dioxide)		Attainment/Unclassified	Attainment/Unclassified
CO (Carbon Monoxide)		Attainment/Unclassified	Attainment/Unclassified

State Attainment Status			
Pollutant		Colusa County	Sutter County
O₃ (Ozone)	1 Hour Standard	Non-Attainment	Non-Attainment
PM₁₀ (Particulate Matter)		Non-Attainment	Non-Attainment
NO₂ (Nitrogen Dioxide)		Attainment/Unclassified	Attainment/Unclassified
SO₂ (Sulphur Dioxide)		Attainment/Unclassified	Attainment/Unclassified
CO (Carbon Monoxide)		Attainment/Unclassified	Attainment/Unclassified
Sulfate		Attainment/Unclassified	Attainment/Unclassified
H₂S (Hydrogen Sulfide)		Attainment/Unclassified	Attainment/Unclassified
Lead		Attainment/Unclassified	Attainment/Unclassified
Visibility Reducing Particles		Attainment/Unclassified	Attainment/Unclassified

Construction of this project would result in the generation of suspended particulate matter. Although the amount of dust would result in impacts, the impacts would be temporary, local, and limited to the areas of construction.

3.4.3 Mitigation Measures

Dust control practices would be incorporated into the project to minimize potential impacts from construction activities. These practices would comply with Caltrans Standard Specifications, Feather River Air Quality Management District Rule 3.16, and Colusa County Air Pollution Control District Rule 2.16.

3.5 Noise

FHWA guidelines for assessing traffic noise are contained in Title 23 of the Code of Federal Regulations (CFR), Part 772 (23 CFR 772), “Procedures for Abatement of Highway Traffic Noise and Construction Noise”. Under 23 CFR 772, a noise study and abatement must be considered for Type 1 projects when construction significantly changes either the horizontal or vertical alignment, or increases the number of through-traffic lanes. This is not a Type 1 project, as defined in 23 CFR 772 and a noise study is not required by FHWA.

3.5.1 Affected Environment

The area surrounding the proposed project is comprised of residences, businesses, and agricultural land. A residential area is located in Colusa, and consists of an apartment complex, mobile home park, and single-family homes. A small residential area is also located in Meridian and there are homes scattered throughout the rural portions of the project.

3.5.2 Impacts

The proposed construction of two-way left-turn lanes, passing lanes, and wider shoulders is considered a minor change in the alignment and would not result in increased noise levels. Additionally, the project proposes to place open graded asphalt concrete on the highway surface, which could lower existing traffic noise levels.

During construction of the project, noise from construction activities would dominate the noise environment in the immediate area. Construction activities would be temporary in nature, typically occurring during normal working hours. Construction noise impacts could be adverse, as nighttime operations or use of equipment could result in annoyance or sleep disruption for nearby residences.

3.5.3 Abatement Measures

Construction noise is regulated by Caltrans Standard Specifications Section 7-1.01I (Sound Control Requirements). These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations. Adverse construction noise would be minimized through the following measures:

- Minimize nighttime, holiday, and weekend work.
- Stationary construction equipment, such as compressors and generators, should be shielded and located as far away as feasible from receptors.
- Construction operations should be placed in locations where noise disturbances would be minimized.
- Hold community meetings to inform area residents of construction work, schedule, and control measures to be taken to reduce impacts.

3.6 Wetlands and Other Waters of the United States

The ACOE and the EPA jointly define wetlands as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. The term “other waters of the United States” includes seasonal or perennial waters (creeks, lakes, or ponds) and other types of habitats that lack one or more of the three technical criteria for wetlands (soil, hydrology, or vegetation). The ACOE has authority under Section 404 of the Clean Water Act to regulate activities that could discharge fill or dredge material into, or otherwise adversely modify these resources.

Executive Order 11990 establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. The U. S. Department of Transportation (DOT) promulgated DOT Order 5660.1A in 1978 to comply with this direction. On federally funded projects, impacts to wetlands must be identified in the environmental document. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included. This must be documented in a specific Wetlands Only Practicable Alternative Finding in the final environmental document.

For the proposed project, “waters of the U. S.” are divided into jurisdictional wetlands and “other waters of the U. S.” The methodology set forth in the ACOE 1987 Wetland Delineation Manual was used to delineate wetlands within the project limits. Additional information is contained in the Natural Environment Study prepared for this project and is available at the Caltrans, District 3 Office of Environmental Management.

3.6.1 Affected Environment

Freshwater seasonal wetlands are found throughout the Colusa County portion of the project. Perennial wetlands are found along SR 20 from Steer Ditch to the SR 45 intersection. Other waters of the U. S. within the project limits include Steer Ditch, Powell Slough, the Sacramento River, and various unnamed drainage/irrigation canals.

3.6.2 Impacts

Jurisdictional Wetlands - Approximately 3.25 ha (8.03 ac) of wetlands—2.80 ha (6.92 ac) of freshwater seasonal wetlands and 0.45 ha (1.11 ac) of perennial wetlands—would be permanently impacted by this project. Approximately 4.86 ha (12.02 ac) of wetlands—4.06 ha (10.03 ac) of freshwater seasonal wetlands and 0.81 ha (1.99 ac) of perennial wetlands—would be temporarily impacted during construction. Preliminary mapping of wetlands and waters of the U.S. is contained in Appendix C. Final wetland impact totals would be calculated after the wetland delineation is verified by ACOE. Final wetland impact calculations would be done during the permit application process.

Waters of the United States - Approximately 0.06 ha (0.15 ac) of other waters of the U.S. would be permanently impacted by this project. Temporary impacts to waters of the U.S. are estimated to be approximately 0.34 ha (0.83 ac). Final impacts would be calculated once design plans for culvert replacements are completed.

Federal regulations require that there be no net loss of wetlands. All projects are required to incorporate water quality measures to prevent water pollution within and beyond project areas. With no net loss of wetlands and mandatory water quality measures, it is expected that any impacts to wetlands and waters of the U.S. would be temporary in nature and that mitigation that includes creation and preservation of natural habitats would facilitate sustainability throughout the region.

3.6.3 Mitigation Measures

A Conceptual Mitigation Plan will be prepared by the District Biologist describing specific mitigation measures to offset temporary and permanent wetland impacts. Wetland impacts would be mitigated to result in a no net loss of wetlands. Mitigation measures to offset permanent impacts may include, but are not limited to, obtaining

credits at an approved mitigation bank. At a proposed ratio of 1:1, 2.80 ha (6.92 ac) of freshwater seasonal wetlands and 0.45 ha (1.11 ac) of perennial wetlands would be needed to offset permanent wetland impacts resulting from this project. Temporary impacts to wetlands would be mitigated through the restoration of the project area to pre-project conditions.

The following measures would protect remaining wetland areas from impacts during construction:

- Wetland areas that are not impacted by the project would be designated as Environmentally Sensitive Areas (ESAs) and identified on project plans and in the field with temporary sedimentation fencing and hay bales.
- The exact location of wetland ESAs would be established during the pre-construction period by the Caltrans District Biologist.
- Sedimentation fencing would be installed by the contractor and would remain in place through completion of the project.
- ESAs would be established as one of the first orders of work.
- Equipment staging areas would be established outside the wetland ESAs to further reduce impacts to these areas.

3.7 Vegetation

Oak woodlands are protected under Senate Concurrent Resolution No. 17 (SCR 17). SCR 17 states that “all state agencies, including, but not limited to, those specified in this measure, having land use planning duties and responsibilities shall, in the performance of those duties and responsibilities and in a manner consistent with their respective duties and responsibilities, undertake to assess and determine the effects of their land use decisions or actions within any oak woodlands containing Blue, Engelman, Valley, or Coast Live Oak, that may be affected by the decisions or actions.” Under SCR 17, an oak woodland is defined as a five-acre circular area containing five or more oak trees per acre. The California Department of Fish and Game (CDFG) also considers oak woodlands to be a valuable sensitive resource, and requires mitigation for oak tree removal.

Executive Order 13112 directs federal agencies to prevent and control the spread of invasive species. FHWA requires an analysis of the risk for any federal funded action to cause or promote the introduction or spread of invasive species. Noxious weeds are identified from the California Department of Food and Agriculture (CDFA) Noxious Weed List and the list of noxious weeds found in the Federal Noxious Weed Regulation 7 CFR 360.

3.7.1 Affected Environment

Valley Oak Woodlands and Individual Oaks - There are two small patches of valley oak woodlands within the project limits, approximately 1.6 km (1 mi) to the west of the Sacramento River in Colusa County. Individual valley oak trees (*Quercus lobata*) are found at various locations within the Colusa County portion of the project.

Valley Mixed Riparian Forest - A small section of valley mixed riparian forest is found within the Colusa County portion of the project limits. Several species of willow including Goodding's willow (*Salix gooddingii*), red willow (*Salix laevigata*), narrow-leaved willow (*Salix exigua*), and arroyo willow (*Salix lasiolepis*) are found within the project limits. Four large Fremont cottonwood (*Populus fremontii*) trees are located adjacent to the highway and an agricultural field to the west of Sycamore Road in Colusa County. Willows and cottonwoods are also found in an unmaintained irrigation/drainage ditch near Hageman Road in Sutter County.

Invasive Species/Noxious Weeds - Annual and perennial weeds grow throughout the project area. No plants from the Federal Noxious Weed Regulation 7 CFR 360 were identified in the project area. Noxious weeds from the CDFA Noxious Weed list that were observed in the project area included yellow star-thistle (*Centaurea solstitialis*), broad-leaved peppergrass (*Lepidium latifolium*), medusa head (*Taeniatherum caput-medusae*), Johnsongrass (*Sorghum halipense*), Bermuda grass (*Cynodon dactylon*), Italian thistle (*Carduus pycnocephalus*), bull thistle (*Cirsium vulgare*), Russian thistle (*Salsola tragus*), field bindweed (*Convolvulus arvensis*), and milk thistle (*Silybum marianum*). Giant reed (*Arundo donax*) and Himalayan blackberry (*Rubus discolor*) were also observed in the project area. These species are not on either noxious weed list, but are known to be invasive plant species.

3.7.2 Impacts

Valley Oak Woodlands and Individual Oaks - Forty-four valley oak trees would be removed as a result of this project. The loss of these oaks would not noticeably change the landscape.

Valley Mixed Riparian Forest - Vegetation associated with valley mixed riparian forest would be impacted during construction of this project. Approximately 50 willow trees as well as blackberry shrubs (*Rubus discolor* and *R. ursinus*) and poison oak (*Toxicodendron diversilobium*) would be removed in riparian areas located west of the Sacramento River and near Steer Ditch. The loss of willows would not noticeably change the landscape.

Invasive Species/Noxious Weeds - The proposed project has the potential to introduce or spread invasive plant species and noxious weeds with the clearing, grading, and soil-moving operations associated with roadway construction.

3.7.3 Mitigation Measures

Where possible, efforts should be made to avoid the removal of native trees within the project limits. All trees to be avoided by work would be protected throughout the construction period by designation as ESAs and by staking or fencing their canopies. These trees would be marked on project plans and in the field.

A Conceptual Mitigation Plan will be prepared by the District Biologist for the project describing the specifics of the mitigation: implementation schedule, site location, site preparation, planting and establishment techniques, maintenance, performance criteria commitments for monitoring, and remedial action plans if performance criteria are not met. The District Biologist would work with Landscape Architecture to accomplish the tree mitigation required for this project.

Valley Oak Woodlands and Individual Oaks – Mitigation for loss of oaks is consistent with SCR 17, as well as CDFG's consideration of oak woodlands as a sensitive resource. To mitigate for the loss of valley oak trees, the following replacement planting ratios would be used:

- Valley oak trees smaller than six inches diameter at breast height (dbh) would be replaced at a ratio of one valley oak replanted for every one tree removed.

- Valley oak trees larger than 6 inches dbh would be replaced at a ratio of one valley oak replanted for every one inch dbh of tree removed.

Based on these ratios, a total of 696 valley oak trees would be needed to replace those lost as a result of this project. Valley oak acorns collected from the project site would be used for the replacement plantings. Generally, 100 oak trees can be planted per 0.4 ha (1 ac) of land. Approximately 2.8 ha (7 ac) would be needed to accommodate the valley oak plantings.

Where possible, valley oak acorns would be planted along Caltrans right-of-way within the project limits. If there is not enough room within the right-of-way to accommodate replantings, the remainder of the valley oak mitigation would occur offsite.

Valley Mixed Riparian Forest – The following mitigation and avoidance measures would minimize the loss of trees:

- Four large cottonwood trees found to the west of Sycamore Road would be designated as an ESA during construction.
- To mitigate for the loss of willow trees associated with valley mixed riparian forest, five willow cuttings would be replanted for every one willow tree removed. Based on this ratio, a total of 250 willow cuttings would need to be planted to replace willows lost as a result of this project.
- Willow cuttings would be planted within Caltrans right-of-way.

Invasive Species/Noxious Weeds - The following revegetation measures for all disturbed soils would reduce the potential to introduce or spread invasive plant species and noxious weeds from or into the project area:

- The contract specifications for permanent erosion control would require the use of California native forb and grass species, from the same elevation and geographic area as the project site.
- All areas disturbed by construction would be treated with a seed mix comprised of local native grasses and forbes.
- Soils would be amended with compost containing long-term soil nutrients and slow-release organic fertilizers to provide nutrients over the first year.

- Mulches used on the project would be from source materials that would not introduce exotic species. No wheat or barley straw would be used on the project because of the potential to introduce weeds. Rice straw would be used in non-wetland areas. In wetland areas, only native grass straw would be used.

3.8 Special Status Species

Special status species are plants, animals, and fish that are considered rare, threatened, or endangered by local, state, or federal resource conservation agencies. These agencies include the USFWS, National Marine Fisheries Service (NMFS), CDFG, and the California Native Plant Society (CNPS). These agencies protect and manage special status species and potential special status species under the federal Endangered Species Act, California Endangered Species Act, California Fish and Game Code, and the California Native Plant Protection Act.

To identify sensitive species that may be present in the project area, Caltrans consulted state and federal sensitive species lists and the California Natural Diversity Database (CNDDB). A list of sensitive species and habitats developed from these sources can be found in Appendix D, Tables 1, 2, and 3. Many of the species listed have not been observed in the project area, but potential habitat is present. Additional information is contained in the Natural Environment Study prepared for this project and is available at the Caltrans, District 3 Office of Environmental Management.

3.8.1 Affected Environment

Plants

Brittlescale (*Atriplex depressa*). Brittlescale is a federal species of concern and a CNPS List 1B (rare, threatened, or endangered in California and elsewhere) species. Several scattered patches of brittlescale were observed along the east side of SR 20, adjacent to the Dolan Ranch parcel in Colusa County. The patches ranged from one individual plant to 800 individual plants, with an approximate total of 1,188 total plants observed. No other brittlescale plants were observed during surveys.

Northern California Black Walnut (*Juglans californica* var. *hindsii*). The Northern California black walnut is listed as a CNPS List 1B species. Individual Northern California black walnut trees are found within the Colusa County portion of the

project limits. The Northern California black walnut is a widely naturalized tree and natural stands of this species are rare.

Birds

Tricolored Blackbird (*Agelaius tricolor*). The tricolored blackbird is listed as a federal species of concern and a state species of special concern. Foraging and nesting habitat for the tricolored blackbird is present within the project limits. No tricolored blackbirds or nests were observed during site visits. There are two CNDDDB records of tricolored blackbird sightings near the project limits: one 8 km (5 mi) east of Colusa and one near the town of Meridian.

Swainson's Hawk (*Buteo swainsoni*). The Swainson's hawk is listed as a state threatened species. Within the project limits, suitable foraging habitat for Swainson's hawk includes agricultural fields, annual grassland, and ruderal areas along the roadside. The only CNDDDB occurrence of the Swainson's hawk within the vicinity of the project is located on the Sacramento River, 1.6 km (1 mi) north of the town of Meridian. Other CNDDDB occurrences of Swainson's hawks in the region are concentrated along the Sacramento River. Swainson's hawks were not found to be nesting within the project limits or within 0.40 km (0.25 mi) of the project limits during surveys.

Migratory Birds. Federal and state laws protect migratory birds, their occupied nests, and their eggs from destruction. Swallows were observed nesting underneath the Meridian Bridge (#18-0008) and Steer Ditch Bridge (#15-0018). Old mallard nests were observed in the wetland vegetation along the project limits. Other migratory birds were observed using the fields and trees during winter site visits.

Insects

Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). The valley elderberry longhorn beetle is listed as a federal threatened species. Habitat for the valley elderberry longhorn beetle is present within the project limits. A total of thirty-one elderberry shrubs are located in the project area. Evidence of the valley elderberry longhorn beetle's presence was not observed on any of these elderberry shrubs. There is one documented sighting of the valley elderberry longhorn beetle in the CNDDDB in the vicinity of the project.

Vernal Pool Crustaceans

The following species of vernal pool crustaceans may potentially occur within the project area:

- Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) - Federal threatened species
- Vernal Pool Tadpole Shrimp (*Lepidurus packardii*) - Federal endangered species.
- California Linderiella Fairy Shrimp (*Linderiella occidentalis*) - Federal species of concern.

Vernal pool tadpole shrimp and California linderiella fairy shrimp have been found during surveys conducted by Wildlands, Inc. at Dolan Ranch. According to mapping and information obtained from Wildlands, Inc., areas delineated as seasonal wetlands and vernal pools are found near the property boundary between Caltrans right-of-way and the Dolan Ranch parcel. The occurrence of vernal pool tadpole shrimp at Dolan Ranch is also found in the CNDDB. No other areas along the project were determined to be suitable habitat for vernal pool crustaceans. The seasonal and perennial wetlands located within the project limits do not contain the characteristic features of vernal pools, and were not considered to be suitable habitat for vernal pool crustaceans.

The project is near proposed Critical Habitat for the vernal pool tadpole shrimp. This Critical Habitat unit is primarily limited to Dolan Ranch.

Reptiles

Giant Garter Snake (*Thamnophis gigas*). The giant garter snake is listed as both a federal and state threatened species. The project limits are located within the current range of the giant garter snake and contain both aquatic and upland habitat. Ricelands, used by giant garter snakes as aquatic habitat, comprise the majority of the land within the Sutter County portion of the project limits. There is also a rice field in the Colusa County portion of the project limits. Agricultural waterways such as irrigation ditches are found throughout the project limits. A perennial wetland containing water year-round is located within the Colusa County portion of the project.

There are no CNDDDB records of giant garter snake sightings within the vicinity of this project, but there are several reports of sightings in other sections of both Colusa and Sutter Counties.

Northwestern Pond Turtle (*Clemmys marmorata marmorata*). The northwestern pond turtle is a federal species of concern and a state species of special concern. Potential habitat for the northwestern pond turtle within and adjacent to the project limits includes the mud-bottomed drainage/irrigation ditches throughout the project, Steer Ditch, Powell Slough, and the perennial wetland located between Steer Ditch and the SR20/SR 45 intersection. The northwestern pond turtle was not observed during surveys conducted for this project. There are no CNDDDB records of northwestern pond turtle occurrences within the vicinity of the project.

3.8.2 Impacts

The special status species addressed in this section are those identified during surveys to have a high probability of occurring in the project area.

Brittlescale – No work would occur off the existing pavement adjacent to the brittlescale plants. There would be no impacts to the brittlescale plants located within the project limits.

Northern California Black Walnut - Approximately five Northern California black walnut trees would be removed as a result of this project. The loss of trees would be minimized to the fullest extent possible and would not noticeably change the landscape.

Tricolored Blackbird - Impacts could occur from removal of vegetation that may provide potential nesting habitat. With avoidance measures in place, this project would not impact the tricolored blackbird or its habitat.

Swainson's Hawk - This project may adversely affect the Swainson's hawk and its habitat. The project would permanently impact 14.7 ha (36.4 ac) of Swainson's hawk foraging habitat.

Migratory Birds – Swallows nesting under the Meridian Bridge (#18-0008) and the Steer Ditch Bridge (#15-0018) would not be impacted, since the bridges will not be modified during construction. With avoidance measures in place, other birds

protected under the Migratory Bird Treaty Act and California Fish and Game Code would not be impacted by the project.

Valley Elderberry Longhorn Beetle - This project may adversely affect the valley elderberry longhorn beetle and its habitat. The project would have both direct and indirect impacts to valley elderberry longhorn beetle habitat and any valley elderberry longhorn beetles present. Direct impacts would occur to those shrubs that will either be transplanted or destroyed in conjunction with the proposed project. Indirect impacts would occur to those shrubs that may be impacted by construction activities such as exposure to construction noise and dust, and soil disturbance adjacent to the root zone.

A total of 24 elderberry shrubs would be impacted by the project. Ten elderberry shrubs would be directly impacted and 14 would be indirectly impacted during construction of the project. Seven elderberry shrubs that are located over 6.1 m (20 ft) from project activities would not be impacted during the construction of this project with the implementation of avoidance measures.

Vernal Pool Crustaceans - The alignment of the highway adjacent to the Dolan Ranch parcel would be shifted to the west to avoid impacts to Dolan Ranch. All widening would occur to the west side of the highway at this section of the project. With avoidance measures in place, this project would not impact vernal pool tadpole shrimp, California linderiella fairy shrimp, or their habitat.

Giant Garter Snake - This project may adversely affect the giant garter snake and its habitat. Giant garter snake habitat impacted by the project includes perennial wetlands and irrigation/drainage canals, and associated upland habitat. No ricelands would be impacted by the project. The project would impact a total of 13.63 ha (33.66 ac) of giant garter snake habitat - 5.66 ha (13.98 ac) would be permanently impacted and 7.97 ha (19.68 ac) would be temporarily impacted. Of upland habitat, 5.12 ha (12.65 ac) would be permanently impacted, and 6.91 ha (17.07 ac) would be temporarily impacted. Of aquatic habitat, 0.54 ha (1.33 ac) would be permanently impacted, and 1.06 ha (2.61 ac) would be temporarily impacted.

Northwestern Pond Turtle - Impacts could occur to northwestern pond turtles due to disturbance of their aquatic habitat. With avoidance measures in place, this project would not impact the northwestern pond turtle or its habitat.

3.8.3 Mitigation Measures

A Conceptual Mitigation Plan will be prepared for this project outlining specific mitigation and monitoring requirements for the following special status species. In addition, Caltrans and FHWA have entered into formal consultation with the USFWS for federally listed species, pursuant to Section 7 of the Federal Endangered Species Act. Mitigation measures for these species are subject to the review and approval of the USFWS. Caltrans would comply with any new or modified mitigation measures developed during the consultation process.

Brittlescale - The brittlescale population would be added to the Caltrans District 3 ESA database, and would be protected during future highway maintenance activities. The following avoidance measures would protect brittlescale plants from any inadvertent impacts during construction:

- The area between the highway and the property fence for Dolan Ranch would be designated as an ESA, and would be off-limits to construction activities.
- The ESA fencing would be installed as a first order of work, prior to any ground disturbing activities.
- Work would only occur at the edge of existing pavement along this portion of the project.
- Siltation fencing would be placed along the existing edge of pavement to protect the area from damage from pedestrian and vehicle traffic, and construction debris.

Northern California Black Walnut - Where possible, efforts would be made to avoid the removal of native trees within the project limits. The following measures would minimize impacts to Northern California black walnut trees:

- All trees to be avoided by work would be protected throughout the construction period by designating them as ESAs and by staking or fencing their canopies. These trees would be marked on project plans and in the field.
- To mitigate for the loss of Northern California black walnut trees, a replacement planting ratio of five saplings for every one black walnut tree removed would be used. Based on this ratio, a total of 25 Northern California black walnut saplings would be needed to replace those lost as a result of this project. Black walnut tree saplings would be planted on site, within Caltrans right-of-way.

Tricolored Blackbird - To protect any tricolored blackbirds that may nest within the project limits, pre-construction surveys of the wetland vegetation would be conducted prior to the start of construction. If an active bird nest is found, vegetation removal and/or construction may not begin until after the chicks have fledged.

Swainson's Hawk - According to CDFG guidelines, impacts to suitable foraging habitat within a 16.09 km (10 mi) radius of an active Swainson's hawk nest must be mitigated. For projects that are located within 1.6 km (1 mi) of an active Swainson's hawk nest, mitigation is required at a ratio of 1:1. To offset permanent impacts to Swainson's hawk foraging habitat, Caltrans proposes to purchase 14.7 ha (36.4 acres/units) of credits at an approved mitigation bank. Minimization and mitigation measures for the Swainson's hawk would be coordinated with CDFG and incorporated into the final project design. These measures may include, but are not limited to the following:

- Surveys would be conducted prior to construction to monitor any potential nesting sites. If a site becomes active prior to construction, CDFG would be notified immediately. Work in the vicinity of the nest would not proceed until any potential issues are resolved. If it is determined that construction could cause the bird to abandon the nest (while incubating or caring for fledglings), construction would cease until all juvenile birds have fledged.
- If an occupied nest is observed and potential impacts obligate compensation, mitigation measures would be coordinated with CDFG (under the California Endangered Species Act and California Fish and Game Code 3503.5) and USFWS (under the Migratory Bird Treaty Act).
- Swainson's hawk foraging habitat that is temporarily disturbed during construction would be restored to pre-project conditions.

Migratory Birds and Raptors, Including Swallows and Mallards - It is anticipated that migratory birds may try to nest in the vegetation and certain structures within the project area. If any work will alter vegetation, the contractor shall take the following measures, as necessary, to prevent impacts to migratory birds:

- Pre-construction surveys for active bird nests should be conducted in early spring prior to the start of construction each season.

- If an active bird nest is found, vegetation removal and/or construction may not begin until after the chicks have fledged.
- Tree removal should not interfere with the nesting of migratory birds. Nest trees should only be removed during the time period of November through February. Trees without nests, or with nests that are no longer occupied, can be removed at any time during the year.

Valley Elderberry Longhorn Beetle – Based on ratios from the USFWS 1999 “*Conservation Guidelines for the Valley Elderberry Longhorn Beetle*,” 124 elderberry shrub seedlings and 124 associate native species would be planted to compensate for direct and indirect impacts to habitat for the valley elderberry longhorn beetle. Mitigation measures may include, but are not limited to, obtaining credits at an approved mitigation bank. Mitigation requirements for the valley elderberry longhorn beetle are outlined in Table 3.2.

Table 3.2 Valley Elderberry Longhorn Beetle/Shrub Mitigation

Stem location and size (diameter at ground level)	Number of stems impacted	Ratio for elderberry shrub plantings	Elderberry shrub plantings needed	Ratio for associate native plantings	Associate native plantings needed
Riparian – 1”-3”	38	2:1	76	1:1	76
Riparian – 3”-5”	7	3:1	21	1:1	21
Riparian – >5”	4	4:1	16	1:1	16
Non-riparian – 1”-3”	11	1:1	11	1:1	11
Total	60		124		124
124/5 (5 elderberry shrubs per credit) = 24.8 = 25 mitigation credits					

To protect elderberry shrubs during construction, the standard avoidance and minimization measures outlined in the *Conservation Guidelines* would be implemented. These measures include:

- All areas that are to be avoided would be designated ESAs, and would be fenced off and flagged. ESA fencing would be placed 6.1 m (20 ft) from the driplines of the remaining twenty-six elderberry shrubs. In areas where construction would occur within 6.1 m (20 ft) of the dripline of an elderberry shrub, ESA fencing would be placed as far away from the shrub as possible. The location of the ESAs would be noted on project plans.

- Contractors would be educated about the importance of not touching or damaging the elderberry shrubs, and what the consequences of doing so are.
- Signs would be placed every 15 m (50 ft) along the edge of the ESAs stating: “This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.” These signs would be readable from 6.1 m (20 ft) away. The signs would be maintained during the entire duration of construction.
- Contractors and workers would be informed about the status of the valley elderberry longhorn beetle and the need to protect its host plant, the elderberry shrub, prior to construction. This would take place at a pre-construction meeting between Caltrans and the contractor.
- Any impacts to buffer areas would be restored after construction is complete. The affected areas would be revegetated with native plants appropriate for the project location.
- Upon completion of construction, the elderberry shrubs would continue to be protected as an ESA. Placards designating the elderberry shrubs as an ESA would be installed to protect the shrubs during any future highway maintenance activities.
- Insecticides, herbicides, fertilizers, or other chemicals would not be used within 30.5 m (100 ft) of any elderberry shrub within the project limits.
- Caltrans BMPs would be in place during construction and would serve to minimize soil erosion and airborne dust.

Vernal Pool Crustaceans - To protect vernal pool crustaceans and other resources present at Dolan Ranch, the area between the highway and the property fence for Dolan Ranch would be designated as an ESA, and would be off-limits to construction activities. Siltation fencing would be placed along the existing edge of pavement to protect the area from damage from foot and vehicle traffic, and construction debris.

Giant Garter Snake - Following the guidelines outlined in the USFWS *Programmatic Formal Consultation for U. S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake* (1997), permanent impacts would

be compensated at a ratio of 3:1. Giant garter snake habitat that is temporarily impacted would be restored to pre-project conditions, and replaced at a ratio of 1:1. Mitigation measures for the loss of giant garter snake habitat may include, but are not limited to, obtaining credits at an approved mitigation bank. Mitigation requirements are described in Table 3.3.

Table 3.3 Mitigation for Giant Garter Snake Habitat

Giant Garter Snake Habitat Type	Permanent Impacts ha (ac)	Ratio	Mitigation Credits Needed ha (ac)	Temporary Impacts ha (ac)	Ratio for creation	Mitigation Credits Needed ha (ac)	Total Mitigation Credits Needed ha (ac)
Upland habitat	5.12 (12.65)	3:1	15.36 (37.95)	6.91 (17.07)	1:1	6.91 (17.07)	22.27 (55.02)
Aquatic habitat							
- Perennial wetlands	0.46 (1.13)	3:1	1.37 (3.39)	0.80 (1.98)	1:1	0.80 (1.98)	2.17 (5.37)
- Irrigation/ drainage ditches	0.08 (0.2)	3:1	0.24 (0.6)	0.26 (0.63)	1:1	0.26 (0.63)	0.50 (1.23)
- Ricelands	0	0	0	0	N/A	0	0
Total acres/ credits	5.66 (13.98)		16.97 (41.94)	7.97 (19.68)		7.97 (19.68)	24.94=24.9 (61.62 = 61.6)

The avoidance and minimization measures outlined in the *Programmatic* would be implemented during construction to avoid direct take of giant garter snakes and to protect giant garter snake habitat during construction of this project. While this project does not fall under the *Programmatic*, the *Programmatic* was used as a guide for determining appropriate avoidance measures for the snake. These measures include the following:

- Construction activities within 61 m (200 ft) from the banks of giant garter snake aquatic habitat would be avoided when possible. Heavy equipment would be confined to existing roadways to the greatest extent possible to minimize habitat disturbance.
- Construction activity within giant garter snake habitat would be conducted between May 1 and October 1 to minimize direct take of the giant garter snake. If any work in giant garter snake habitat must occur outside of this window, a qualified biologist would be present on-site during construction to monitor for the presence of giant garter snakes.

- Clearing and grubbing would be confined to the minimum amount necessary to facilitate construction activities. Giant garter snake habitat would be designated as ESAs and would be avoided throughout the construction period. Orange mesh fencing would be placed along the limits of the designated ESA for giant garter snake habitat, as a visual avoidance cue to construction crews. There would be no encroachment (including the staging/operation of heavy equipment or casting of excavation materials) and no other disturbance of the designated ESA for giant garter snake habitat.
- Contractors and workers would receive worker awareness training regarding the giant garter snake, prior to construction. This training would inform them of the status of the giant garter snake, the need to protect both the snake and its habitat, and would instruct workers on how to recognize giant garter snakes and their habitat.
- The project area would be surveyed for giant garter snakes, 24 hours prior to construction activities. Survey of the project area would be repeated if a lapse in construction activity of two weeks or greater has occurred. If a giant garter snake is encountered during construction, activities would cease until appropriate corrective measures have been completed, or it has been determined that the snake would not be harmed. Any giant garter snake sightings or occurrences of incidental take would be reported to the Sacramento USFWS office.
- Any areas that are dewatered would remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling of the dewatered habitat.
- Upon completion of construction activities, any temporary fill or construction debris would be removed. Where possible, disturbed areas would be restored to pre-project conditions.

Northwestern Pond Turtle - The aquatic habitat requirements of the northwestern pond turtle are similar to those of the giant garter snake. The avoidance measures in place to protect the giant garter snake during construction would also protect the northwestern pond turtle. To avoid potential impacts to northwestern pond turtles:

- A qualified biologist would conduct a pre-construction survey at the beginning of construction in areas outlined as habitat.

- Pre-construction surveys would occur 24 hours prior to the start of any dewatering or construction activities. These surveys would be continuous throughout construction as work begins at each location identified as habitat.
- If a northwestern pond turtle is found in the project area, the biologist would try to passively move the turtle out of the area by creating disturbance in the water. If a northwestern pond turtle becomes trapped during any work, the biologist would remove the turtle to a downstream location.

3.9 Hydrology and Floodplains

Executive Order 11988 for Floodplain Management directs federal agencies to refrain from conducting, supporting, or allowing an action in a floodplain unless it is the only practicable alternative. The FHWA requirements for compliance are outlined in 23 CFR 650 Subpart A. An encroachment into a floodplain is defined as “an action within the limits of the 100-year floodplain,” with the 100-year floodplain being defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” The National Flood Insurance Program produces maps that identify 100-year flood areas based on local hydrology, topology, precipitation, flood protection measures, and other scientific data. This program is administered by the Federal Emergency Management Agency (FEMA).

3.9.1 Affected Environment

The project area lies within the Sacramento River watershed. The most notable hydrological features include the Sacramento River, Steer Ditch, and Sycamore Slough. There are also various unnamed drainage canals, freshwater seasonal wetlands, and perennial wetlands. There are no substantial water storage reservoirs and all rainfall is either absorbed into the ground or runs off into local waterways. The average annual rainfall is approximately 47 centimeters (18 inches) with most of the precipitation occurring between October and April. By late summer, most small creeks and streams are generally dry or at their lowest levels. Some small waterways contain water during the dry season due to agricultural irrigation and drainage.

The project corridor is located within portions of the 100-year floodplain as defined by FEMA. In addition, SR 20 passes through special flood hazard areas (500-year floodplains) throughout the project limits. FEMA Flood Insurance Rate Maps were used to determine flood zones in the project area. These zones are defined as follows:

- Zone A – “Special flood hazard areas inundated by 100-year flood. No base flood elevations determined.”
- Zone X – “Areas of 500-year flood; areas of 100-year flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from 100-year flood.”

Within the project limits, 100-year floodplains (Zone A) are present where SR 20 crosses Steer Ditch (Figure 3-1) and at the Meridian Bridge (#18-0008). The roadway, levee, and bridge at the Sacramento River are located above the 100-year floodplain. All other areas within the project are located in a 500-year floodplain (Zone X), as depicted in Figure 3-1.

There is a history of localized flooding during heavy rainfall events on both sides of SR 20 west of the Meridian Bridge (#18-0008) in Colusa County. Minor flooding also occurs near Butte Vista Way in Colusa County and between Drexler Road and Hageman Road in Sutter County.

3.9.2 Impacts

According to a Caltrans Floodplain Hydraulic Study, construction of the project would constitute a transverse encroachment into the 100-year floodplain at the Sacramento River and at Steer Ditch west of the SR 20/SR 45 intersection. In compliance with 23 CFR 650.111, the following information is offered:

- The proposed action would not support incompatible floodplain development.
- No significant impacts to natural and beneficial floodplain values would result.
- Routine construction procedures would minimize impacts on the floodplain.
- No significant risks, as defined in 23 CFR, Section 650.105(o), are associated with the implementation of the proposed action.
- The proposed action does not constitute a significant floodplain encroachment as defined in 23 CFR, Section 650.105(q).

The project has been assessed as having a very low level of risk associated with raising floodwater elevations, if roadway profiles are not increased substantially within the 100-year floodplain at Steer Ditch. During final design, additional surveys

will be performed to determine the extent to which the roadway profile can be increased without affecting floodwater elevations. The proposed construction would not adversely affect the drainage or flood potential within the project limits. The increase in impermeable surfaces from construction of this project would have a negligible effect on drainage.

The project would involve extending or replacing culverts within the project limits. These culverts would be placed in-line with existing facilities and would not result in alterations in flow patterns. Culvert work would take place when the irrigation ditches and drainage canals are dry.

The project proposes to raise the highway profile along a 0.3 km (0.2 mi) section of SR 20 (KP 62.0/62.3; PM 38.5/38.7) to the west of the Meridian Bridge (#18-0008) in Colusa County. In this area, high groundwater levels and no outfall for surface drainage results in flooding on both sides of the roadway. At times, groundwater levels rise above the ground surface. Existing cross culverts serve the purpose of balancing elevated groundwater elevations on either side of the highway. Evidence of groundwater resulting in flooding on both sides of the highway was obtained from June 1972 to July 1977 where twenty-one groundwater wells, seven water depth staffs (located both in and out of the Sacramento River levee system), and one pond stage gauge were monitored. Comparison of this data showed that as the water surface elevation of the river rose for prolonged periods of time within the levee system to elevations above the ground surface elevation outside the levee system, groundwaters rose correspondingly and water became visible on both sides of the highway. Comparisons of two staff gages, located west of the Meridian Bridge (#18-0008), show nearly the same water surface elevation on both the south and north sides of the highway, confirming that the highway has little effect on groundwater and surface water levels in this area. The project would not result in additional flooding impacts by raising the highway profile.

3.9.3 Mitigation Measures

No mitigation is required. To prevent the possibility of increased 100-year flood elevations on surrounding properties, the highway profile should not be substantially raised in the Steer Ditch area.

Figure 3-1 Floodplain Map

3.10 Parks, Recreational Areas, and Wildlife/Waterfowl Refuges

3.10.1 Affected Environment

Several federal wildlife refuges are located in the vicinity of the project and comprise the Sacramento National Wildlife Refuge Complex. These refuges include the Butte Sink National Wildlife Refuge, Colusa National Wildlife Refuge, Delevan National Wildlife Refuge, Sacramento National Wildlife Refuge, Sacramento River National Wildlife Refuge, Sacramento River National Wildlife Refuge (Llano Seco Unit), and Sutter National Wildlife Refuge.

The Gray Lodge Wildlife Refuge and Sutter Bypass Wildlife Area, managed by CDFG, are also located near the project. In addition, several private duck clubs and gun clubs, and the California Department of Parks and Recreation Colusa-Sacramento River State Recreation Area are located in the vicinity of the project. All of these complexes provide habitat for resident and migrant birds and are considered to be part of the Pacific Flyway.

3.10.2 Impacts

There would be no impacts to these facilities. Construction of the project would not increase the use of these areas.

3.10.3 Mitigation Measures

No mitigation is required.

3.11 Land Use, Planning, and Growth

3.11.1 Affected Environment

The project begins in Colusa County near the city of Colusa and extends past the town of Meridian to Hageman Road in Sutter County. Land use at the beginning of the project is residential, recreational, commercial, and light industrial. The Colusa County Airport is located in this area to the west of SR 20. Farther into the project,

land use changes and is comprised mostly of agricultural development and open space. Dolan Ranch, a conservation and mitigation bank, is located to the east of SR 20 within this section of the project. Perennial wetlands occur between Steer Ditch and the SR 20/SR 45 intersection. From the SR 20/SR 45 intersection to the town of Meridian, land use is residential and agricultural, with several small farms. Land use from the town of Meridian to the end of the project is primarily residential and agricultural.

3.11.2 Impacts

The proposed project would convert light industrial, agricultural, and residential land uses to highway use. The project would require the acquisition of approximately 7.7 ha (19.0 ac) of land. This would consist of strips of land adjacent to the existing alignment needed for construction of passing lanes and widening of the roadway. The proposed project is consistent with the policies contained in the Colusa and Sutter County General Plans. Since the project would not increase highway capacity, it is not expected to support population growth.

3.11.3 Mitigation Measures

No mitigation is required.

3.12 Farmlands/Agricultural Lands

The provisions of the Farmland Protection Policy Act of 1984 (FPPA) require agencies to coordinate with the Natural Resources Conservation Service (NRCS) to examine the effects of farmland conversion before approving any federal action. The NRCS classifies agricultural lands into three categories: prime farmlands, unique farmlands, and farmlands of state and local importance. In compliance with the FPPA, Caltrans and the NRCS are required to complete a Farmland Impact Rating Form AD-1006 for any project that would result in conversion of farmland to non-agricultural uses

The Williamson Act, also known as the California Land Conservation Act of 1965, was enacted to protect agricultural and open-space lands. The program allows landowners to place their property under a Williamson Act contract, during which time the land is assessed for property taxes at a rate consistent with agricultural use,

rather than its full market value. Although state highway projects are generally exempt under provisions of Section 51293 of the Williamson Act, agencies are required to notify the Department of Conservation of the possible acquisition of contracted land.

3.12.1 Affected Environment

Agricultural lands are present throughout the project area. From the SR 20/SR 45 intersection to the Sacramento River in Colusa County, there are cultivated fields with corn and rice as well as fruit/nut orchards. In Sutter County, a variety of crops including wheat, rice, and other grains; fruit/nut orchards; and squash are grown from near Meridian to Hageman Road. Several fallow fields are also found in this area.

In Colusa County, there are six parcels of land currently enrolled in Williamson Act contracts. Sutter County does not participate in the Williamson Act program; therefore, no parcels would be affected within this portion of the project.

3.12.2 Impacts

The project would convert approximately 6.4 ha (15.9 ac) of farmland to transportation use. These acquisitions would be in the form of strips of land adjacent to the existing alignment. According to the NRCS, these farmlands are classified as “prime and unique” and of “statewide and local importance” as depicted in Table 3.4.

Table 3.4 Farmland Conversion

County	Prime & Unique ha (ac)	Statewide & Local Importance - ha (ac)	Total Farmland Conversion - ha (ac)
Colusa	1.9 (4.8)	3.7 (9.1)	5.1 (13.9)
Sutter	0.8 (2.0)	0	0.8 (2.0)
Total	2.7 (6.8)	3.7 (9.1)	6.4 (15.9)

In accordance with the FPPA, Caltrans initiated coordination with the NRCS and Farmland Conversion Impact Rating Forms were completed for the proposed project in both Colusa and Sutter Counties (Appendix E). The overall farmland impact rating for both counties was low and project impacts are considered minor.

The project would acquire approximately 2.2 ha (5.5 ac) of land from six parcels currently enrolled in Williamson Act contracts in Colusa County (Table 3.5). The total amount of land covered by the six parcels is approximately 333 ha (824 ac). Impacts from the proposed project would affect approximately 0.67 percent of Williamson Act land in the project area. Caltrans notified the Director of the California Department of Conservation of the possible acquisition of this Williamson Act contracted land (Appendix A).

Table 3.5 Williamson Act Parcel Acquisitions

Assessor Parcel Number	Owner	Land Designation	Acquisition Area ha (ac)	Total Area ha (ac)
017-030-010	Beverly A. Walls, et al Davis Ranches	Agricultural Preserve	0.31 (0.77)	252.52 (624.0)
017-030-062	Beverly A. Walls, et al Davis Ranches	Agricultural Preserve	1.08 (2.67)	8.05 (19.88)
017-070-021	Beverly A. Walls, et al Davis Ranches	Agricultural Preserve	0.41 (1.01)	4.89 (12.09)
017-080-031	Beverly A. Walls, et al Davis Ranches	Agricultural Preserve	0.24 (0.59)	13.77 (34.03)
017-080-034	Beverly A. Walls, et al Davis Ranches	Agricultural Preserve	0.12 (0.30)	5.80 (14.32)
017-080-035	Beverly A. Walls, et al Davis Ranches	Agricultural Preserve with Proposition 8*	0.07 (0.17)	48.24 (119.21)
TOTAL:			2.23 (5.51)	333.27 (823.53)

*Proposition 8 provides a temporary reduction in tax assessments when the market value of a property falls below taxable value.

3.12.3 Mitigation Measures

No mitigation is required.

3.13 Community Impacts (Social, Economic) and Environmental Justice

3.13.1 Affected Environment

In Colusa and Sutter Counties, SR 20 is heavily used for hauling agricultural commodities from the surrounding fields and orchards during harvest season and for transporting agricultural equipment. Within the project area, there are two communities separated by rural areas with residences and farms. The city of Colusa

is located at the beginning of the project in Colusa County. Meridian is a small farming community located to the east of the Sacramento River in Sutter County. The primary economic activity and major source of employment for Colusa County is agriculture and agricultural-related businesses. In Sutter County, the economy is based on agriculture, food processing, lumber and wood products, and government.

Residential – Residences in the project area include single family homes, an apartment complex, and a mobile home park in Colusa. There are also several residences located in the project area in Meridian. There are scattered residences in the rural areas outside Colusa and Meridian.

Business - Businesses in the project area consist of commercial and light industrial establishments located along SR 20 near the city of Colusa. The Sunsweet Growers Prune Drying Facility is located to the east of SR 20 and adjacent to a mobile home park. Colusa Industrial Properties is a 450-acre business park located to the west of SR 20 near Colusa. Current tenants of Colusa Industrial Properties include a brick and block manufacturer, cold storage facility, rice storage facility, and government agencies related to agriculture. The Colusa County Golf Club is a privately owned golf course located to the west of SR 20 and adjacent to Colusa Industrial Properties. A self-service mini storage business is also located in this area.

The Colusa County Airport is located within the project limits on the west side of SR 20. The airport is used for both general and agricultural aviation, although most flight operations are agricultural and related to aerial application of chemicals and seed. There is no commercial air charter service available at the Colusa County Airport. The runway is 914 m (3,000 ft) in length and lies almost parallel to SR 20. At the southeast end of the airfield, where SR 20 and the runway are closest, the calculated airfield sphere of influence is approximately 42 m (138 ft) above the elevation of the runway. No restrictions or special considerations would be necessary, since the terrain in this area is flat and construction of the project would not interfere with the airspace.

Demographics – Based on the U.S. Census Bureau 2000 census, the racial and ethnic composition within the project area in the community of Colusa is approximately 54% white and 39% Hispanic. In Meridian, 86% of the population is white and nine percent is Hispanic. In both Colusa and Meridian, the white population is slightly higher than the county averages, while the Hispanic populations are lower (Table 3.6).

Table 3.6 Racial and Ethnic Composition

Population Groups	Colusa County	Project Area City of Colusa (Census Tract 2, Block 1)	Sutter County	Project Area Town of Meridian (Census Tract 509, Block 2)
White	48%	54%	60%	86%
African American	1%	1%	2%	0
American Indian	1%	1%	1%	0
Asian	1%	2%	11%	2
Hispanic	47%	39%	22%	9%
Other	2%	3%	4%	5%
Total Population	18,804	3,551	78,930	316

Source: U.S. Census Bureau, Census 2000.

The median household income and per capita income in the community of Colusa is higher than the county-wide average. In Meridian, the median household income is lower than the county-wide average, while the per capita income remains the same (Table 3.7).

Table 3.7 Income Comparisons

Income in 1999 (dollars)	Colusa County	Project Area City of Colusa (Census Tract 2, Block 1)	Sutter County	Project Area Town of Meridian (Census Tract 509, Block 2)
Median Household Income	35,062	37,435	38,375	30,179
Per Capita Income	14,730	16,367	17,428	17,381

Source: U.S. Census Bureau, Census 2000.

3.13.2 Impacts

Right-of-Way - Right-of-way acquisition would be required for construction of the project and consists of residential, commercial, industrial, and agricultural land. Partial acquisitions from fifty-one parcels would require a total of 7.7 ha (19.0 ac) of new right-of-way. Improvements to be acquired include a mobile home office, mini-storage building, and various types of fencing. Property owners would be compensated the fair market value for any land or improvements acquired by Caltrans.

Environmental Justice – The demographic analysis of the areas surrounding the project indicates the presence of low-income and minority populations. The proposed project would not result in permanent impacts to these residents. Temporary impacts during construction, including traffic delays, lane closures, and dust and noise generated from equipment could affect residents. These impacts would be minor and short-term and would not result in disproportionately high health or environmental effects on minority or low-income populations. The project is considered to be consistent with the objectives of Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority and Low Income Populations).

3.13.3 Compensation

Property owners would be compensated the fair market value for any land or improvements acquired by Caltrans. Relocation assistance will be provided in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

3.14 Utilities/Emergency Services

3.14.1 Affected Environment

A variety of utility lines traverse the project area including natural gas, electrical, telephone, fiber optic, water, and sewer. These utilities are located both overhead and underground.

3.14.2 Impacts

Utility relocation would be necessary for this project. At this time, it is expected that no overhead utility relocations would be required. Potential underground utility relocations contained within the project study limits include natural gas, electrical, telephone, fiber optic, and sewer lines. A natural gas piping station located adjacent to the Sunsweet Prune Drying Facility near Colusa would also be relocated. Relocation plans are preliminary and would be completed during final design of the project. Caltrans will coordinate closely with utility companies to ensure minimum disruption of service to customers in the project area.

No emergency services would be adversely impacted by construction of the project. The proposed project would not change access routes for emergency vehicles. During construction, Caltrans will coordinate with appropriate emergency response agencies to ensure adequate response times. The proposed project would result in improved conditions for fire protection, law enforcement, and other emergency response services along SR 20.

3.14.3 Mitigation Measures

No mitigation is required.

3.15 Traffic Transportation/Pedestrian and Bicycle Facilities

3.15.1 Affected Environment

SR 20 is an “ocean to mountain” route, beginning at SR 1 near Fort Bragg and ending at Interstate 80 near Emigrant Gap. It is a Federal Aid Primary Route serving regional, commercial, agricultural, and recreational traffic. SR 20 is a major east-west connector to Interstate 5, SR 99, SR 70, and I-80. The section of SR 20 located in the project area is a relatively flat two-lane conventional highway that experiences slow moving traffic from recreational vehicle and agricultural-related activities. The Meridian Bridge (#18-0008), joining Colusa and Sutter Counties, is the only major structure within the project limits.

There are no existing pedestrian or bicycle facilities within the project area with the exception of a pedestrian walkway located on the Meridian Bridge (#18-0008). Pedestrian use occurs primarily in Colusa and Meridian and is currently limited to the shoulder areas at both locations. Bicyclists are currently allowed to use the roadway shoulders in the project area, although there are no designated bike lanes.

3.15.2 Impacts

The project would improve traffic flow, enhance safety, and reduce congestion on this section of SR 20 with construction of wider shoulders, two-way left-turn lanes, passing lanes, and intersection improvements.

Bicycle and pedestrian safety is expected to improve with construction of wider shoulders. At the Meridian Bridge (#18-0008), the walkway would be widened to maintain required American Disability Act (ADA) standards, if needed. A 1.5 m (4.9 ft) landing would be constructed on the east side of the bridge to meet ADA standards.

One-lane traffic control and temporary closures would be necessary to accommodate construction. A Traffic Management Plan will be prepared for this project. Construction would be staged in a manner to reduce impacts to the traveling public. At locations where widening is required on both sides of the existing roadbed, each side would be widened in different construction stages.

3.15.3 Mitigation Measures

No mitigation is required.

3.16 Visual/Aesthetics

3.16.1 Affected Environment

The visual and aesthetic environment surrounding the proposed project is characterized by typical views of residential, light industrial, and agricultural land uses. Riparian habitat and wetlands are also located within the project area. The project begins near the southern edge of the city of Colusa. Commercial land use in this area includes the Colusa County Airport, as well as several light industrial businesses. These facilities are visible from the highway.

Native vegetation is nearly non-existent in the immediate viewshed of the project other than a few areas along SR 20 between Colusa and Meridian. In this area, the project parallels wetlands and riparian habitats. Native vegetation includes needlegrass, valley oaks, Fremont cottonwood, and willows.

The town of Meridian is located along the Sacramento River, which divides Colusa and Sutter Counties. Meridian is a rural community and only small portions of the town are visible from SR 20. Orchards and flat open fields are the predominant middle and foreground views in the eastern portion of the project. Silos and farmhouses are scattered throughout the landscape in rural areas. Farmhouses are

masked with large stands of trees, which are the only vertical elements seen for great distances.

The Sutter Buttes are a major landmark in the area and can be seen in the background from nearly all points while traveling eastbound on SR 20 in the project area.

3.16.2 Impacts

Construction of the proposed roadway would result in the removal of vegetation and trees in the riparian areas west of the Meridian Bridge (#18-0008). Residents and travelers along the corridor would be moderately affected by visual impacts created by the proposed highway widening and associated vegetation removal.

3.16.3 Mitigation Measures

Impacts to the visual character of the project area would be mitigated by the following measures:

- Trees removed for the project would be replanted at a ratio of one planting per one-inch diameter at breast height of tree removed.
- Erosion control plans and specifications would be required for the NPDES permit and must be prepared by a Landscape Architect.
- Mitigation plantings should be done on site, if possible. If on-site mitigation is not feasible, mitigation would be done offsite.

3.17 Historic and Archaeological Resources

Federal regulation for cultural resources is governed primarily by Section 106 of the National Historic Preservation Act of 1966 (as amended). Section 106 requires federal agencies to take into account the effects of their actions on historic properties, and provides the Advisory Council on Historic Preservation the opportunity to comment on such actions. For compliance with NEPA, the FHWA follows the Council's implementing procedures contained in 36 CFR Part 800. Historic and archaeological resource studies performed pursuant to these statutes are documented in a Historic Property Survey Report prepared by Caltrans. For compliance with the

California Environmental Quality Act (CEQA), the State Historic Preservation Office (SHPO) must provide concurrence with Caltrans' findings regarding project impacts.

3.17.1 Affected Environment

Cultural resources located within the Area of Potential Effects (APE) for this project include:

- Six architectural properties constructed prior to 1957;
- Sixteen architectural properties constructed in 1957 or later;
- Two bridges: Meridian Bridge (#18-0008) and Steer Ditch Bridge (#15-0018).

The six properties containing pre-1957 built resources were evaluated for potential eligibility for listing in the National Register of Historic Places and the California Register of Historical Resources. Of the six, the former Northern Electric Railway depot in Meridian, was determined to be eligible for inclusion in the National Register and the California Register. The remaining five properties were formally evaluated, but are not eligible for listing.

In accordance with the "Caltrans Interim Policy for the Treatment of Buildings Constructed in 1957 or Later," none of the 16 properties constructed in 1957 or later are eligible for inclusion in the National Register, are not historical resources, and require no further study. The Meridian Bridge (#18-0008) and the Steer Ditch Bridge (#15-0018) are not eligible for listing. No archaeological resources were identified within the project area. A concurrence letter from the SHPO regarding determination of eligibility is contained in Appendix A.

3.17.2 Impacts

With protective measures in place, the project would have no effect on the only historic property within the APE, the Northern Electric Railway depot. The Northern Electric Railway depot is approximately 15.2 m (50.0 ft) south of SR 20 in the town of Meridian. Construction in the vicinity of the depot would occur within the existing right-of-way.

3.17.3 Mitigation Measures

No mitigation is required. With the following protective measures in place, the project would have no effect on cultural resources:

- Caltrans would establish an ESA along the boundary of the Northern Electric Railroad depot in the town of Meridian. The contractor should be informed as to the purpose and importance of the ESA.
- If buried cultural materials are encountered during construction activities, it is Caltrans policy that work in the immediate vicinity of the find halt until a qualified archaeologist can evaluate the nature and significance of the find.

3.18 Unavoidable Adverse Impacts

The proposed project would not result in unavoidable adverse impacts. The project would not degrade the quality of the environment, or cause substantial adverse effects on human beings, either directly or indirectly. None of the impacts of this project are expected to contribute to a cumulatively considerable impact.

Chapter 4 Cumulative Impacts

The proposed project is not expected to result in adverse cumulative impacts. It is a not a capacity increasing project and there are currently no plans to widen this section of SR 20 for additional lanes of travel. For this project, the area used for evaluation of cumulative effects is the SR 20 corridor between Interstate 5 and SR 99. Future roadway improvement projects planned in the cumulative effects area are listed in Table 4.1. These road rehabilitation projects would not collectively contribute to cumulative impacts.

Table 4.1 Projects Considered in Cumulative Effects Evaluation

Responsible Agency	Project Name	Type of Project	Location	Status
Caltrans	SR 20 Roadway Rehabilitation (03-1A97V0)	Rehabilitate pavement, widen shoulders, add passing lanes and two-way left-turn lanes	Butte Vista Way in Colusa County to Hageman Road in Sutter County	Proposed project; Programmed for 04/05 fiscal year
City of Colusa	Seventh Street Rehabilitation	Road rehabilitation	Seventh Street from Webster to Parkhill Street	Programmed for 06/07 fiscal year
City of Colusa	Parkhill Street Rehabilitation	Road rehabilitation	Parkhill Street from Tenth Street to Eleventh Street	Programmed for 06/07 fiscal year
City of Colusa	Wescott Road Rehabilitation	Road rehabilitation	Wescott Road from Louis Lane to Country Club Drive	Programmed for 06/07 fiscal year
Colusa County	Norman Road Rehabilitation	Road rehabilitation	Norman Road from SR 45 to Glenn County line	Programmed for 06/07 fiscal year
Colusa County	Grimes-Arbuckle Road Rehabilitation	Road rehabilitation	Grimes-Arbuckle Road from SR 45 to Sycamore Slough Road	Programmed for 06/07 fiscal year
Colusa County	Highway 99W Rehabilitation	Road rehabilitation	Highway 99W from Arbuckle to Hahn Road	Programmed for 06/07 fiscal year
Colusa County	Hahn Road Reconstruction	Road rehabilitation, obliterate existing surface, add base, and chip seal	Hahn Road from Cortina School Road extending 3 miles to the east	Construction is scheduled for 02/03 fiscal year
Colusa County	Meyers Road Reconstruction	Road rehabilitation, obliterate existing surface, add base, and chip seal	Meyers Road from Husted Road to near Evans Road	Construction is scheduled for 02/03 fiscal year

4.1 Potential Cumulative Effects

4.1.1 Special Status Species

When listed species are affected, consultation with USFWS under the Federal Endangered Species Act and CDFG under the California State Endangered Species Act would be completed for future projects that may occur in the area. Cumulatively, the viability of some sensitive species throughout the region could be impacted. Each project would mitigate for specific impacts through avoidance, creation, and preservation. Often, through mitigation requirements, the resource agencies are able to obtain large parcels of suitable habitat, creating a continuity that facilitates viability among individual species. This project is not expected to have an adverse cumulative effect to threatened and endangered wildlife and plant species.

4.1.2 Wetlands and Waters of the U.S.

Federal regulations require that there be no net loss of wetlands. All projects are required to incorporate water quality measures to prevent water pollution within and beyond project areas. With a no net loss of wetlands and mandatory water quality measures, it is expected that any impacts to wetlands and waters of the U. S. would be temporary in nature, and that mitigation of natural habitats would facilitate sustainability throughout the region.

4.1.3 Other Resources

The proposed project is not expected to contribute to cumulative effects to water quality, farmland, air quality, noise, floodplains, visual resources, hazardous waste, and cultural resources.

Chapter 5 California Environmental Quality Act Evaluation

5.1 CEQA Environmental Checklist

The following checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. The CEQA impact levels include potentially significant impact, less than significant impact with mitigation, less than significant impact, and no impact. Please refer to the following for detailed discussions regarding impacts:

CEQA:

- Guidance: Title 14, Chapter 3, California Code of Regulations, Sections 15000 et seq. (http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines/)
- Statutes: Division 13, California Public Resource Code, Sections 21000-21178.1 (http://www.ceres.ca.gov/topic/env_law/ceqa/stat/)

CEQA requires that environmental documents determine significant or potentially significant impacts. In many cases, background studies performed in connection with the project indicate no impacts. A “no impact” reflects this determination. Any needed discussion is included in the section following the checklist.

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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AESTHETICS - Would the project:

a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

AGRICULTURE RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Expose sensitive receptors to substantial pollutant concentration?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Create objectionable odors affecting a substantial number of people?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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BIOLOGICAL RESOURCES - Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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COMMUNITY RESOURCES - Would the project:

a) Cause disruption of orderly planned development?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Be inconsistent with a Coastal Zone Management Plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Affect life-styles, or neighborhood character or stability?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Physically divide an established community?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Affect property values or the local tax base?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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i) Result in alterations to waterborne, rail, or air traffic?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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j) Support large commercial or residential development?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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k) Affect wild or scenic rivers or natural landmarks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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CULTURAL RESOURCES - Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

GEOLOGY AND SOILS - Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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HAZARDS AND HAZARDOUS MATERIALS -

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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HYDROLOGY AND WATER QUALITY - Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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LAND USE AND PLANNING - Would the project:

a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Conflict with any applicable habitat conservation plan or natural community conservation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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MINERAL RESOURCES - Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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NOISE - Would the project:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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POPULATION AND HOUSING - Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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PUBLIC SERVICES -

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Police protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Schools?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Parks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Other public facilities?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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RECREATION -

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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TRANSPORTATION/TRAFFIC - Would the project:

a) Cause an increase in traffic which his substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incomplete uses (e.g., farm equipment)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Result in inadequate emergency access?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Result in inadequate parking capacity?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

UTILITY AND SERVICE SYSTEMS - Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
--------------------------------	--	------------------------------	-----------

e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

g) Comply with federal, state, and local statutes and regulations related to solid waste?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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MANDATORY FINDINGS OF SIGNIFICANCE -

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, or cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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5.2 Discussion of Significant Impacts Under CEQA

Discussion of specific impacts to the following resources can be found in Chapter 3.

Biological Resources

Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species?

The following special status species could be impacted by the proposed project: valley elderberry longhorn beetle, giant garter snake, Swainson's hawk, northwestern pond turtle, brittlescale, migratory birds, vernal pool tadpole shrimp, California linderiella fairy shrimp, and potential habitat for vernal pool fairy shrimp.

Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act?

Wetlands would be permanently impacted by the construction of this project. Approximately 3.25 ha (8.03 ac) of wetlands—2.80 ha (6.92 ac) of freshwater seasonal wetland and 0.45 ha (1.11 ac) of perennial wetlands—would be permanently impacted by this project. Approximately 4.86 ha (12.02 ac) of wetlands—4.06 ha (10.03 ac) of freshwater seasonal wetlands and 0.81 ha (1.99 ac) of perennial wetlands—would be temporarily impacted during construction.

Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural communities?

Valley oaks, willows associated with valley mixed riparian forest, and Northern California black walnut trees would be removed as a result of the proposed project.

5.3 Mitigation Measures for Significant Impacts Under CEQA

Mitigation will be provided for impacts to the valley elderberry longhorn beetle, giant garter snake, Swainson's hawk, wetlands, valley oak, willows, and Northern California black walnut. Specific mitigation measures are discussed in Chapter 3. With implementation of these measures, the project is not expected to result in significant impacts.

A Conceptual Mitigation Plan will be prepared describing the specifics of mitigation including an implementation schedule, site location, site preparation, planting and establishment techniques, maintenance, performance criteria commitments for monitoring, and remedial action plans if performance criteria are not met.



Chapter 6 **Summary of Public Involvement Process**

In October 2002, Caltrans sent letters to property owners located adjacent to the project near the Meridian Bridge (#18-0008) in Colusa County. Storm water runoff has been a concern for property owners along this section of SR 20. In this area, the project proposes to raise the existing roadway profile above the historic flood elevation and replace existing drainage systems. Property owners were encouraged to meet with Caltrans to discuss the proposed project and any drainage concerns. On December 19, 2002, a meeting was held with one property owner and his concerns were addressed. Discussions are ongoing with several property owners to present the option of closing the west end of Steidlmayer Road at the SR 45/SR 20 intersection. Upon concurrence of the property owners, the Colusa County Board of Supervisors would conduct a hearing to formally approve the road closure.

This Draft Environmental Assessment/Initial Study will be available for public review and comment for a minimum of 30 days. During the public review, a notice of availability and opportunity for a public workshop will be advertised. Comments received during the review period will be added to the Final Environmental Assessment/Initial Study.



Chapter 7 List of Preparers

This Environmental Assessment/Initial Study was prepared by the North Region of the California Department of Transportation (Caltrans). The following Caltrans staff prepared this Environmental Assessment/Initial Study:

- Baker, Gwyn**, Associate Environmental Planner. Four years experience in environmental planning and document preparation. **Contribution: Peer Review and Former Environmental Coordinator.**
- Baker, Jean L.**, Senior Environmental Planner. Twenty years experience in preparing and supervising the preparation of environmental documents. **Contribution: Environmental Branch Chief.**
- Beyer, Alicia**, Environmental Engineer. Ten years experience in hazardous waste studies. **Contribution: Updated Hazardous Waste Initial Site Assessment.**
- Chadha, Raj**, Environmental Engineer, Twelve experience in preparing hazardous waste studies. **Contribution: Hazardous Waste Initial Site Assessment.**
- DeWall, Mike**, Hydraulic Engineer. Twenty-one years of civil engineering experience, including five years in hydraulics. **Contribution: Floodplain Hydraulic Study.**
- Haney, Jeff**, Associate Environmental Planner (Archaeology). Twenty years experience, including ten years in California archaeology. **Contribution: Historic Property Survey Report and Negative Archaeological Survey Report.**
- Lammert, Laurie**, Transportation Engineer, Ten years experience in design and project development. **Contribution: Former Project Engineer.**
- Maesaka, Jerry**, Transportation Engineer, Thirteen years experience in design and project development. **Contribution: Project Engineer.**
- Montre, Rick**, Senior Transportation Engineer. Sixteen years experience in design and project development. **Contribution: Design Branch Chief.**

Olah, Jennifer, Associate Environmental Planner (Natural Sciences). Six years experience in biological studies. **Contribution: Natural Environment Study Report and Biological Evaluation.**

Pommerenck, Adele, Environmental Planner. Two years experience in environmental planning and document preparation. **Contribution: Environmental Coordinator and Document Preparation.**

Pommerenck, Keith, Transportation Engineer, Eighteen years experience in preparing air, noise, and energy studies. **Contribution: Air and Noise Reports.**

Schimpf, Brenda, Project Manager, Six years experience in project development and delivery. **Contribution: Project Manager.**

St. John, Gail, Associate Environmental Planner (Architectural History). Seven years experience in conducting historic architectural studies and building condition assessments. **Contribution: Historical Resources Evaluation Report.**

Weston, Brandon, Landscape Associate, Three years experience performing visual impact assessments. **Contribution: Visual Impact Assessment.**

Chapter 8 References

- Alt 2000 David D. Alt, Don W. Hyndman. *Roadside Geology of Northern and Central California*. Missoula, MT: Mountain Press Publishing Company. 2000, pp. 249-250.
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- FEMA 1988 Federal Emergency Management Agency. Flood Insurance Rate Map, Sutter County. Panel No. 060394 0075 B.
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- Harradine 1948 Frank F. Harradine. *Soils of Colusa County*. Division of Soils, University of California at Berkeley, June 1948.
- SCA 1989 Sedway Cooke Associates. *Colusa County General Plan*. March 1989.



Appendix A Coordination and Consultation

This appendix contains correspondence regarding coordination and consultation with federal and state agencies.

NEPA/404 Concurrence Letters

- Initiation of NEPA/404 Integration Process and Request for Concurrence of Purpose and Need and Project Alternative, August 12, 2002.
- Concurrence on Purpose and Need and Project Alternative from U.S. Fish & Wildlife Service, August 30, 2002.
- Concurrence on Purpose and Need and Project Alternative from U.S. Environmental Protection Agency, September 25, 2002.
- Concurrence on Purpose and Need and Project Alternative from U.S. Army Corps of Engineers, October 1, 2002.

U.S. Fish & Wildlife Service Consultation for Endangered Species Act

- Initiation of Consultation Pursuant to Section 7 of the Endangered Species Act, March 27, 2003.

U.S. Army Corps of Engineers Wetland Delineation

- Request for Verification of Wetland Delineation, April 16, 2003.

State Historic Preservation Office Letters

- Request for Concurrence of Historic Property Survey Report, January 31, 2003.
- Concurrence of Findings, Request for Additional Information, March 3, 2003.

Natural Resources Conservation Service

- Request for Farmland Conversion Impact Rating (Colusa County), October 23, 2003.

- Request for Farmland Conversion Impact Rating (Sutter County), October 23, 2003.
- Determination of Farmland Conversion Impact Rating for Sutter County, November 6, 2002.
- Determination of Farmland Conversion Impact Rating for Colusa County, November 18, 2002.

California Department of Conservation

- Notification of Williamson Act Land Acquisition, May 1, 2003.
- Response to Williamson Act Land Acquisition Notification, May 27, 2003.

Appendix B Title VI Policy Statement

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July 26, 2000

TITLE VI POLICY STATEMENT

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, sex and national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

A handwritten signature in black ink that reads "Jeff Morales".

JEFF MORALES
Director



Appendix C Preliminary Mapping of Wetlands and Waters of the United States



Appendix D Special Status Species Tables



Appendix E Farmland Conversion Impact Rating Form



Appendix F Mitigation and Monitoring Commitments

This appendix will be finalized upon completion of consultation with the USFWS and preparation of the Conceptual Mitigation Plan. Specific mitigation and monitoring requirements will be incorporated into the final environmental document.